

REMARKS

Claims 1-18 are pending in the present application. In the above amendments, Claims 1, 4, 6, 7, 9, 10, 13, 14 and 16 have been amended. Claims 2, 3, 11, and 12 have been canceled without prejudice, and new Claims 19-20 have been added.

No new matter was added. The amendments to Claims 1 and 10 are supported by original Claims 2-4, 9 and 16 and the original specification at page 6, lines 14-19; page 15, lines 10-15. Amendments to Claims 6, 7, 13 and 14 are supported by Fig. 8 and page 17, lines 11-18 of the specification. New Claim 19 is supported by page 7, lines 7-9 and page 12, lines 7-8 of the specification. New Claim 19 is supported by Fig. 7 and pages 16-17 of the specification.

The 12/28/2004 Office Action rejected Claims 1-3 and 10-12 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,611,515 B1 to Balachandran et al.

First, Balachandran does not disclose “a transmitter operative to transmit ACK/NAK information on an ACK/NAK channel for every received data unit,” as recited in Applicant’s Claim 1. Balachandran teaches away from Claim 1 by stating “Supervisory ARQ Status PDUs are used to provide the transmitter with periodic feedback of the receiver state.” Figs. 23 and 24 of Balachandran show ARQ STATUS protocol data units (PDUs), which are not sent by the mobile 270 in response for every transmitted CONTINUE PDU with “data blocks” from the base station 265 (col. 12, line 66 to col. 13, line 34).

Second, Balachandran does not disclose a communication system that uses code division multiplex access (CDMA). Balachandran teaches a “GSM General Packet Radio Service” (col. 1, lines 44-45). Specifically, Balachandran does not disclose “a multiplier to cover the ACK/NAK information with a code to define the ACK/NAK channel,” as recited in Claim 1. Balachandran also does not disclose “a spreader operative to spread the covered ACK/NAK information,” as recited in Claim 1.

Third, Balachandran does not disclose “a channel gate for gating said ACK/NAK channel based on whether the receiver detected a matching preamble in the first data unit received by said receiver, the channel gate being configured to prevent transmission of the ACK/NAK channel for all data units of the packet when the receiver determines the preamble in the first data unit does not match the preamble assigned to the apparatus,” as recited in Claim 1.

For these reasons, Applicant respectfully submits that Claim 1 is allowable over Balachandran. Claim 10 has been amended to include limitations similar to Claim 1 and should be allowable for the reasons stated for Claim 1.

The Office Action rejected Claims 4 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Balachandran in view of U.S. Patent No. 5,577,024 A to Malkamaki et al. and U.S. Patent No. 6,665,382 B2 to Dunn et al.

The combination of Balachandran, Malkamaki and Dunn does not teach Applicant's Claim 1 because Malkamaki and Dunn fail to teach the limitations of Claim 1 that are not found in Balachandran, as described above.

For Claims 4 and 16, the Office Action stated Malkamaki teaches "a multiplier for Walsh covering" and cites col. 3, lines 7-10. However, the cited lines 7-10 of col. 3 in Malkamaki do not mention "a multiplier for Walsh covering." Applicant conducted electronic searches for "multiplier" and "Walsh" in Malkamaki and did not find these words in Malkamaki.

Applicant agrees with the Office Action that Dunn mentions "BPSK." But there is no motivation to combine Balachandran's system with a "BPSK" in Dunn to modulate "ACK/NAK information," as recited in Claims 4 and 16. Even if there was motivation, the combination of Balachandran, Malkamaki and Dunn does not teach Applicant's Claims 1 and 10, which are the base claims of Claims 4 and 16, respectively.

The Office Action rejected Claims 6-8 and 13-15 under 35 U.S.C. § 103(a) as being unpatentable over Balachandran in view of Malkamaki. Page 4 of the Office Action stated "Balachandran may be silent or deficient to a portion of a time slot and Balachandran teaches a portion of time slot at e.g., column 1, lines 45-67."

Applicant searched column 1, lines 45-67 of Balachandran, and "time slot" was not found. If the Office Action meant column 1, lines 45-67 of Malkamaki, there is nothing in Malkamaki that teaches an "ACK/NAK channel" with "a duration of half a time slot," as recited in Applicant's Claims 6 and 13 and shown in Fig. 8

For Claims 7 and 14, there is nothing in Malkamaki that teaches "slot timing of said ACK/NAK channel is offset by a portion of a time slot from a slot timing used in said communication system."

For Claims 8 and 15, there is nothing in Malkamaki that teaches “said ACK/NAK channel is transmitted by a portion of a slot time in advance of a slot timing used in said communication system.”

The Office Action rejected Claims 5, 9, 17, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Balachandran in view of WO 99/23844 to Padovani et al.

First, the combination of Balachandran and Padovani does not teach Claims 1 and 10, which are the base claims of Claims 5, 9, 17 and 18, respectively. Second, there is no motivation to combine Balachandran and Padovani because Balachandran relates to a “GSM” system (col. 1, lines 44-45), and Padovani relates generally to a CDMA system (page 1, lines 15-35). Also, neither reference suggests a need or desire to sum an “ACK/NAK channel” with a “data rate control/pilot channel,” as recited in Claims 5 and 17, in combination with elements recited in base Claims 1 and 10. Thus, one of ordinary skill in the art would have no motivation to combine Balachandran and Padovani.

Specification

The amendments to the specification are made by presenting marked up replacement paragraphs which identify changes made relative to the immediate prior version. These corrections are intended to correct grammar, typographical errors, awkward wordings and inconsistencies between various sections of the specification and figures. The changes are fully supported by the original application, and no new matter was added.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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By: ACC
Alex C. Chen, Reg. No. 45,591
(858) 651-5363

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 651-4125
Facsimile: (858) 658-2502